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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/734,617
Filing Date: December 12, 2003
Appellant(s): KURZWEIL, RAYMOND C.

Denis G. Maloney, Reg., no. 29,670
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/22/2008 appealing from the Office action mailed 06/16/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(2) Related Appeals and Interferences

None

(3) Status of Claims

This appeal involves claims 1-20.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Hasunuma *et al.* (*Development of Teleportation Master System with a Kinesthetic Sensation of Presence*, 1999).

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. The rejection to claims 1-4, 7-15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hasunuma *et al.* (*Development of Teleportation Master System with a Kinesthetic Sensation of Presence*, 1999)** is maintained.

2. The rejection to claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hasunuma *et al.*** is maintained.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 7-15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hasunuma *et al.* (*Development of Teleportation Master System with a Kinesthetic Sensation of Presence*, 1999)**.

As per claims 1 and 13, **Hasunuma *et al***., teaches a teleportation system and an associated method having a virtual reality encounter system comprising (see figs. 1 and 2), motion sensors positioned on a human user (see figs. 1 and 2, wherein operator being taken as human user), the motion sensors sending motion signals corresponding to movements of the user as detected by the motion sensors relative to a reference point the motion signals over a communications network (see figs. 1 and 2); and a humanoid robot (see figs. 1 and 2), receiving, from the communications network (see figs. 1 and 2), the motion signals to induce movement of the robot according to movement of the human user (see figs. 1 and 2); with respect to claim 13, sending motion signals from motion sensors positioned on a human user (see figs. 1 and 2), the motion signals corresponding to movements of the human user (see section 1, first paragraph, wherein human user being considered as operator, as noted above) as detected by the motion sensors relative to a reference point (see figs. 1 and 2). Note: The entire concept of this application has been embedded into Hasunuma's et al. publication. See entire publication.

As per claims 2 and 14, **Hasunuma *et al***., teaches a teleportation system and an associated method wherein the robot includes actuators corresponding to the motion sensors, the actuators causing the robot to move (see figs. 1 and 2, particularly the humanoid which contains motion sensors, actuator *etc.*).

As per claim 3, **Hasunuma *et al***., teaches a teleportation system wherein the robot has life-like features, the robot comprises: a body; a camera coupled to the body, the camera for sending video signals to the communications network; and a microphone coupled to the body, the microphone for sending audio signals to the communications network (see fig. 1, particularly the Humanoid Robot), note that this particular robot contains a camera couple the head which a

part of the body for sending video signals to the control Cockpit. Also this particular robot contains audio signals capability and antenna in the back of the robot indicates wireless network connection.

As per claim 4, **Hasunuma *et al.***, teaches a teleportation system that further comprising: a set of goggles including a display to render the video signals received from the camera and a transducer to transduce the audio signals received from the microphone (see fig. 1 as noted above and fig. 2, particularly the HMD).

As per claim 6, **Hasunuma *et al.***, teaches a teleportation system wherein the communications network comprises (see figs. 1-2, as noted above): a first communication gateway in the first location (see fig. 1, wherein the Humanoid Robot's location being considered as the first locaiton); and a second communication gateway in the second location (see fig. 1, wherein the Cockpit being considered as the second commutation gateway), the second processor connected to the first processor via a network (see fig. 1, wherein the Cockpit processor being connected the robot's processor).

As per claim 7, **Hasunuma *et al.***, teaches a teleportation system wherein the communications network comprises an interface having one or more channels for: receiving the audio signals from the microphone; receiving the video signals from the camera; sending the audio signals to the set of goggles; and sending the audio signals to the transducer (see fig. 1 and figs. 2 and 3, particularly the HMD from figure 2, as noted above).

As per claim 8, **Hasunuma *et al***., teaches a teleportation system wherein the body includes an eye socket and the camera is positioned in the eye socket (see fig. 1, particularly the camera).

As per claim 9, **Hasunuma *et al***., teaches a teleportation system wherein the body includes an ear canal and the microphone is positioned within the ear canal (the robot of figure being considered as having an ear canal and its microphone can be placed anywhere as far design is concerned).

As per claim 10, **Hasunuma *et al***., teaches a teleportation system wherein the set of goggles, comprise a receiver to receive the video signals (see fig. 2, element HMD).

As per claim 11, **Hasunuma *et al***., teaches a teleportation system wherein the robot, comprises a transmitter to wirelessly send the audio signals, motion signals and the video signals to the communications network (see figs. 1 and 2 as noted above).

As per claim 12, **Hasunuma *et al***., teaches a teleportation system that further comprising: a first communication gateway in the first location the first communication gateway further comprising: a computing device that receives the motion signals and transmits the motion signals over the communications network (see fig. 1, wherein the robot's computer being serve as computing device).

As per claim 18, **Hasunuma *et al***., teaches a teleportation method sending audio signals over the communications network, the audio signals being produced from a microphone coupled to the robot (see fig. 1, see section 2.1, first paragraph); sending the video signals to the communications network (see fig. 1, wherein the arrow between the Cockpit and Humanoid

show proof or two way commutation, particularly "audio-visual"), the video signals being produced from a camera coupled to the robot (see the Humanoid camera as noted above); rendering the video signals received from the communications network using a display embedded in a set of goggles (see figs. 1-2, particularly the control Cockpit); and transducing the audio signals received from the communications network using a transducer embedded in the set of goggles (see figs. 1-2, as noted above).

As per claim 17, **Hasunuma *et al***., teaches a teleportation method wherein the robot includes an eye socket and the camera is positioned in the eye socket (see fig. 1, particularly the camera, as noted above).

As per claim 18, **Hasunuma *et al***., teaches a teleportation method wherein the robot includes an ear canal and further comprising positioning the microphone within the ear canal (the robot of figure being considered as having an ear canal and its microphone can be placed anywhere as far design is concerned, as noted above).

As per claim 19, **Hasunuma *et al***., teaches a teleportation method wherein the set of goggles, comprises a receiver to receive the video signals (see fig. 2, element HMD as noted above).

As per claim 20, **Hasunuma *et al***., teaches a teleportation method wherein the robot further comprises a transmitter to wirelessly send the audio signals, the motion signals and the video signals to the communications network (see figs. 1 and 2, as noted above).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hasunuma *et al.***

As per claims 5 and 16, **Hasunuma *et al.***, teaches essential features of the invention substantially as claimed with the exception of a second humanoid robot in the second location, and a second set of goggles to receive the video signals; and with respect to claim 16, a second mannequin.

However, it would have been obvious to modify Hasunuma *et al.* teachings by using more than one robot/mannequin, that would require more than one goggle to receive video signals or any signals, because modification would have been a desire feature into Hasunuma *et al.* teachings in order to improve the usability and the functionability of system as a whole.

(10) Response to Argument

7. As to the reference not teaching "a set of goggles worn by the user, the goggles including a display to render video signals received from… the at least one camera coupled to houmandoir robot…" (see Hasumura's et al. figs. 1-2), as noted by the applicant's representative, the "HMD" is nothing but a set of goggles to provides video signals to the user through its display, and note

that the robot's head contains a camera. Furthermore, (see figs. 1, 2 and 9, wherein particularly in figure one, an operator being taken as human user that has a head tracker in combination with a head mount display (HUD) being placed on the user's body, bear in mind that these two above mentions features are motion sensors, also the gripping device is a motion sensor as well).

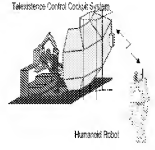

Figure 2 Configuration of telexistence control cockpit system

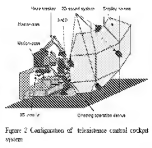

Figure 9 schematic diagram of gripping operation device

With respect to receiving video signals from communication network (see Hasumura's et al. fig. 1), wherein the arrow has been shown clear evidence of wireless network communication between the robot the user.

As to the reference not teaching "a second humanoid robot and a second set of goggles" Examiner maintain his position by stating: it would have been obvious to modify Hasunuma *et al.* teachings by using more than one robot/mannequin, that would require more than one goggle to receive video signals or any signals, because modification would have been a desire feature into Hasunuma *et al.* teachings in order to improve the usability and the functionability of system as a whole, as seen above.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so

long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Therefore, using more than of features and elements fall under design choice and proper reasoning to accomplish more and stronger result.

As to the "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention" (see MPEP 706.02(j) [R-6] Contents of a 35 U.S.C. 103 Rejection 35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references.).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Hasunuma et al., Development of Teleoperation Master System with a Kinesthetic Sensation of Presesnce, 1999, Internet, pages 1-6.

Respectfully submitted,

/McDieunel Marc/

Examiner, Art Unit 3664

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